

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2003/002801

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7 C01B 39/36, B01J 29/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 C01B 39/36, B01J 29/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean Patent and applications for inventions since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
eKIPASS in KIPO, CA online

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,891,199 (Rhône-Poulenc Specialites Chimiques) 2. Jan. 1990 See Claim 1	1, 15, 18
A	US 5,254,327 (Intevep, S.A.) 19. Oct. 1993 See Col. 4 line 35 - Col. 5 line 4, Claim 1	1, 15, 18
A	US 5,240,892 (Mobil Oil Corporation) 31. Aug. 1993 See Col. 4 line 1-26, example 1-5, Claim 20	1, 15, 18
A	US 4,257,885 (Union Carbide Corporation) 24. Mar. 1981 See Col. 3 line 48 - Col. 4 line 45, Claims 5, 6, 8	1, 15, 18
A	US 6,180,550 (Mobile Oil Corporation) 30. Jan. 2001 See Col. 4 line 3 - 32, example 1	1, 15, 18
A	Yongsheng Li et al, "Preparation for ZSM-5 membranes by a two-stage varying-temperature synthesis", Separation and Purification Technology, 25, 459-466, Oct. 2001 See the introduction and membrane preparation	1, 15, 18



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	
"A"	document defining the general state of the art which is not considered to be of particular relevance
"E"	earlier application or patent but published on or after the international filing date
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"O"	document referring to an oral disclosure, use, exhibition or other means
"P"	document published prior to the international filing date but later than the priority date claimed
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"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&"	document member of the same patent family

Date of the actual completion of the international search

29 MARCH 2004 (29.03.2004)

Date of mailing of the international search report

29 MARCH 2004 (29.03.2004)

Name and mailing address of the ISA/KR



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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2003/002801

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4891199	02.01.1990	FR 2552418 JP 60108317 EP 138680 BR 8404855 JP 1054285	29.03.1985 13.06.1985 11.09.1985 13.08.1985 17.11.1989
US 5254327	19.10.1993	NL 9300589 NL 0193144 JP 6007680 JP 2512679 DE 4310792 CA 2092938 BR 9301386	01.11.1993 04.12.1998 18.01.1994 03.07.1996 18.03.1999 19.01.1999 13.10.1993
US 5240892	31.08.1993	NZ 0225813 KR 9602621 EP 0306238 DK 0484288 DE 3879046 CA 1321386 AU 2102588	27.11.1990 24.02.1996 08.03.1989 31.08.1988 24.06.1993 17.08.1993 02.03.1989
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US 6180550	30.01.2001	ZA 0105001 WO 0037398 JP 2002535222 EP 1140740 AU 0021448	19.07.2002 29.06.2000 22.10.2002 10.10.2001 12.07.2000